6

37. (Amended) Nitrogen heterocyclic aromatic derivative having the following structure:

(XVII)

1239. (Amended) The pharmaceutical composition comprising a nitrogen heterocyclic aromatic derivative according to claim 37 in the form of a transdermal skin patch.

A0. (Amended) The pharmaceutical composition comprising a nitrogen heterocyclic aromatic derivative according to claim 37 for intravenous administration.

Cancel claims 47 and 48 and add the following new claims:

20 49. (New) A method of reducing the humoral and cellular immunological response of a mammal comprising administering an effective amount of a nitrogen heterocyclic aromatic derivative having the following general formula:

C

where X and Y are selected from N, C and CH, provided they are different from each other, or X and Y are both nitrogen;

R is hydrogen or -COR₈ where R₈ is a saturated or non-saturated C₁-C₁₀ aliphatic hydrocarbon, R₁ has the following general formula:

$$R_4$$
 (II)

where R_3 is hydrogen, halogen, C_1 - C_{10} alkyl or C_1 - C_{10} alkoxyl, R_4 is hydrogen, C_1 - C_{10} alkyl or C_1 - C_{10} alkoxyl, or R_3 and R_4 together form a methylendioxy group;

R₂ has the following general structure:

$$R_6$$
 CH_2OR_5
(III)

and R₅ is selected from:

where $Z=OR_7$ where R_7 is a saturated or non-saturated, linear or branched C_1-C_{10} aliphatic hydrocarbon, or R_7 has the following formula:

where R, R_1 , X and Y are defined as above and R_6 is hydrogen, halogen, alkyl or alkoxyl C_1 - C_{10} , or Z is NHR₈ where R_8 is a linear or branched C_1 - C_{20} alkyl chain,

provided that when X=Y=N and R is H or -CONHCH₂CH₃, Z is not NHR₈ where R_8 is -CH₂CH₃, and provided that R_1 and R_2 are not located on two adjacent atoms of the heterocyclic aromatic ring, and further provided that when X=Y=N and R_5 is -COZ where $Z=OR_7$, R_7 is a saturated or non-saturated linear or branched C_5-C_{20} aliphatic hydrocarbon.

(Amended) A method of treating a tumor susceptible to therapy comprising administering an effective amount of a nitrogen heterocyclic aromatic derivative having the following general formula:

$$\begin{array}{c|c}
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\$$

where X and Y are selected from N, C and CH, provided they are different from each other, or X and Y are both nitrogen;

R is hydrogen or -COR₈ where R_8 is a saturated or non-saturated C_1 - C_{10} aliphatic hydrocarbon, R_1 has the following general formula:

$$70536$$
 R_4
(II)

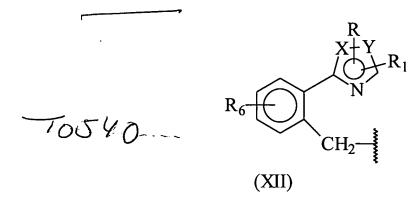
where R_3 is hydrogen, halogen, C_1 - C_{10} alkyl or C_1 - C_{10} alkoxyl, R_4 is hydrogen, C_1 - C_{10} alkyl or C_1 - C_{10} alkoxyl, or R_3 and R_4 together form a methylendioxy group;

R₂ has the following general structure:

$$R_6$$
 CH_2OR_5
(III)

and R_5 is selected from:

where $Z=OR_7$ where R_7 is a saturated or non-saturated, linear or branched C_1-C_{10} aliphatic hydrocarbon, or R_7 has the following formula:



where R, R_1 , X and Y are defined as above and R_6 is hydrogen, halogen, alkyl or alkoxyl C_1 - C_{10} , or Z is NHR₈ where R_8 is a linear or branched C_1 - C_{20} alkyl chain,

provided that when X=Y=N and R is H or -CONHCH₂CH₃, Z is not NHR₈ where R_8 is -CH₂CH₃, and provided that R_1 and R_2 are not located on two adjacent atoms of the heterocyclic aromatic ring, and further provided that when X=Y=N and R_5 is -COZ where Z=OR₇, R_7 is a saturated or non-saturated linear or branched C_5 -C₂₀ aliphatic hydrocarbon.

51. (New) A pharmaceutical composition comprising a nitrogen heterocyclic aromatic derivative according to claim 37 together with a pharmaceutically acceptable carrier or diluent.

